

[4910-13-U]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [66 FR 9027 2/6/2001]

[Docket No. 2000-CE-71-AD; Amendment 39-12099; AD 2001-02-13]

RIN 2120-AA64

Airworthiness Directives; The Cessna Aircraft Company Model 525 (CitationJet 1) Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that applies to certain The Cessna Aircraft Company (Cessna) Model 525 (CitationJet 1) airplanes. This AD requires you to replace certain direct current (DC) power battery switches. This AD is the result of reports of the potential for a certain 8-pole battery switch to fail during flight. The actions specified by this AD are intended to prevent this battery switch from failing while the airplane is in-flight, which is a latent failure. This could result in the pilot's inability to select "EMER" power or the inability to disconnect an overheated main ship's battery. On a battery overheat indication, the Airplane Flight Manual (AFM) instructs the pilot to disconnect the battery and, if the problem cannot be fixed, the pilot should immediately land the airplane. The main ship's battery that remains powered in an overheated condition may become hot enough to damage adjacent components and structure and may interfere with continued flight and a safe landing.

DATES: This AD becomes effective on February 28, 2001.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulation as of February 28, 2001.

The Federal Aviation Administration (FAA) must receive any comments on this rule on or before March 21, 2001.

ADDRESSES: Submit comments in triplicate to FAA, Central Region, Office of the Regional Counsel, Attention: Rules Docket No. 2000-CE-71-AD, 901 Locust, Room 506, Kansas City, Missouri 64106.

You may get the service information referenced in this AD from Cessna Aircraft Company, Product Support, P.O. Box 7706, Wichita, Kansas 67277; telephone: (316) 517-6000; facsimile: (316) 517-8500. You may examine this information at FAA, Central Region, Office of the Regional Counsel, Attention: Rules Docket No. 2000-CE-71-AD, 901 Locust, Room 506, Kansas City, Missouri 64106; or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Clyde Erwin, Aerospace Engineer, FAA, Wichita Aircraft Certification Office, 1801 Airport Road, Room 100, Wichita, Kansas 67209, telephone: (316) 946-4149; facsimile: (316) 946-4407.

SUPPLEMENTARY INFORMATION:

Discussion

What events have caused this AD? The FAA has received reports of a potential problem with 8-pole direct current (DC) battery switches that were installed on Cessna Model 525 (CitationJet 1) airplanes. Eaton (located in Sarasota, Florida) is the original equipment manufacturer (OEM) of the affected switch (Eaton part number A3-205-01/P).

Analysis of the problem shows that the switch could fail to make contact or may make intermittent contact. Certain manufacturing lots were assembled using components that were out-of-tolerance. The application of the switch from this lot, as used in the Cessna Model 525 (CitationJet 1) airplanes, could result in any or all of the following failure conditions:

- the pilot could lose power to the "AVN EMER" bus;
- the pilot could become unable to disconnect an overheated ship's NICAD battery. On a battery overheat indication, the AFM instructs the pilot to disconnect the battery and, if the problem cannot be fixed, the pilot should immediately land the airplane. The main ship's battery that remains powered in an overheated condition may become hot enough to damage adjacent components and structure and may interfere with continued flight and a safe landing. The FAA classifies this condition as catastrophic; and
- the pilot could lose power to the "EMER" bus.

There is no annunciation feature for these failures and they are only detectable in flight while the pilot requires the use of the applicable function.

What are the consequences if the condition is not corrected? This latent failure could result in the battery switch failing while the airplane is in-flight. This could result in the pilot's inability to select "EMER" power or the inability to disconnect an overheated main ship's battery.

Is there service information that applies to this subject? Cessna has issued Service Bulletin No. SB525-24-20, dated November 16, 2000. This service bulletin includes procedures for replacing both the DC power battery switch (Eaton part number A3-205-01/P) and the windshield anti-ice bleed air control switch (Eaton part number A3-204-01).

The FAA's Determination and an Explanation of the Provisions of this AD

What has FAA decided? The FAA has reviewed all available information, including the service information referenced above; and determined that:

- the unsafe condition referenced in this document exists or could develop on other Cessna Model 525 (CitationJet 1) airplanes of the same type design;
- the DC power battery switch replacement specified in the previously-referenced service information (as specified in this AD) should be accomplished on the affected airplanes; and
- AD action should be taken in order to correct this unsafe condition.

What does this AD require? This AD requires you to replace the DC power battery switch (Eaton part number A3-205-01/P with a manufacturer's date code of 9926 through 0039). Accomplishment of this action is required in accordance with Cessna Service Bulletin No. SB525-24-20, dated November 16, 2000.

Are there differences between this AD and the service information? Cessna Service Bulletin No. SB525-24-20, dated November 16, 2000, includes procedures for replacing both the DC power battery switch (Eaton part number A3-205-01/P) and the windshield anti-ice bleed air control switch (Eaton part number A3-204-01).

Failure of the DC power battery switch is latent; the switch can only be tested during a phase check or other maintenance event; and the failure is a safety of flight issue. The anti-ice bleed air control switches are currently checked during preflight and the AFM contains normal emergency procedures should a failure occur in flight. For these reasons, we are only requiring replacement of the DC power battery switch in this AD.

Will I have the opportunity to comment prior to the issuance of the rule? Because the unsafe condition described in this document could result in the pilot not having power to critical flight

components, FAA finds that notice and opportunity for public prior comment are impracticable. Therefore, good cause exists for making this amendment effective in less than 30 days.

Comments Invited

How do I comment on this AD? Although this action is in the form of a final rule and was not preceded by notice and opportunity for public comment, we invite your comments on the rule. You may submit whatever written data, views, or arguments you choose. You need to include the rule's docket number and submit your comments in triplicate to the address specified under the caption "ADDRESSES." We will consider all comments received on or before the closing date specified above. We may amend this rule in light of comments received. Factual information that supports your ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether we need to take additional rulemaking action.

Are there any specific portions of the AD I should pay attention to? The FAA specifically invites comments on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. You may examine all comments we receive before and after the closing date of the rule in the Rules Docket. We will file a report in the Rules Docket that summarizes each FAA contact with the public that concerns the substantive parts of this AD.

We are reviewing the writing style we currently use in regulatory documents, in response to the Presidential memorandum of June 1, 1998. That memorandum requires federal agencies to communicate more clearly with the public. We are interested in your comments on whether the style of this document is clear, and any other suggestions you might have to improve the clarity of FAA communications that affect you. You can get more information about the Presidential memorandum and the plain language initiative at <http://www.plainlanguage.gov>.

How can I be sure FAA receives my comment? If you want us to acknowledge the receipt of your comments, you must include a self-addressed, stamped postcard. On the postcard, write "Comments to Docket No. 2000-CE-71-AD." We will date stamp and mail the postcard back to you.

Regulatory Impact

Does this AD impact various entities? These regulations will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, FAA has determined that this final rule does not have federalism implications under Executive Order 13132.

Does this AD involve a significant rule or regulatory action? The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and is not a significant regulatory action under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory

Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket (otherwise, an evaluation is not required). A copy of it, if filed, may be obtained from the Rules Docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by Reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. FAA amends § 39.13 by adding a new airworthiness directive (AD) to read as follows:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "av-info.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2001-02-13 THE CESSNA AIRCRAFT COMPANY: Amendment 39-12099; Docket No. 2000-CE-71-AD.

(a) What airplanes are affected by this AD? This AD applies to Model 525 (CitationJet 1) airplanes, serial numbers 525-0360 through 525-0400, that:

- (1) incorporate a direct current (DC) power battery switch, Eaton part number A3-205-01/P; and
- (2) are certificated in any category.

(b) Who must comply with this AD? Anyone who wishes to operate any of the above airplanes must comply with this AD.

(c) What problem does this AD address? The actions specified by this AD are intended to prevent this battery switch from failing while the airplane is in-flight, which is a latent failure. This could result in the pilot's inability to select "EMER" power or the inability to disconnect an overheated main ship's battery. On a battery overheat indication, the Airplane Flight Manual (AFM) instructs the pilot to disconnect the battery and, if the problem cannot be fixed, the pilot should immediately land the airplane. The main ship's battery that remains powered in an overheated condition may become hot enough to damage adjacent components and structure and may interfere with continued flight and a safe landing.

(d) What must I do to address this problem? To address this problem, you must accomplish the following actions:

Action	Compliance Time	Procedures
(1) Inspect the airplane to determine whether a DC power battery switch, Eaton part number A3-205-01/P with a manufacturer's date code of 9926 through 0039, is installed.	During the next phase check that occurs 30 calendar days or more after February 28, 2001 (the effective date of this AD) or within the next 60 calendar days after February 28, 2001 (the effective date of this AD), whichever occurs first.	Not Applicable.

Action	Compliance Time	Procedures
(2) If, by inspecting the airplane, you can positively show that one of the affected DC power battery switches is not installed, then the replacement requirement of this AD does not apply. Make an entry into the aircraft records that shows compliance with this portion of the AD, in accordance with section 43.9 of the Federal Aviation Regulations (14 CFR 43.9).	Prior to further flight after the inspection.	Not Applicable.
(3) If, by inspecting the airplane, you find that one of the affected DC power battery switches is installed or you cannot positively show that one of the affected DC power battery switches is not installed, replace with a new switch of the same part number that has a manufacturer's date code of 0040 or later, or FAA-approved equivalent part number.	Prior to further flight after the inspection, unless already accomplished.	In accordance with the Accomplishment Instructions section of Cessna Service Bulletin SB525-24-20, dated November 16, 2000.
(4) Do not install, on any affected airplane, a DC power battery switch, Eaton part-number A3-205-01/P with a manufacturer's date code of 9926 through 0039.	As of February 28, 2001 (the effective date of this AD).	Not Applicable.

Note 1: Cessna Service Bulletin No. SB525-24-20, dated November 16, 2000, includes procedures for replacing both the DC power battery switch (Eaton part number A3-205-01/P) and the windshield anti-ice bleed air control switch (Eaton part number A3-204-01). Failure of the DC power battery switch is latent, the switch can only be tested during a phase check or other maintenance event, and the failure is a safety of flight issue. The anti-ice bleed air control switches are currently checked during preflight and the AFM contains normal emergency procedures should a failure occur in flight. For this reason, we are only requiring replacement of the DC power battery switch in this AD.

(e) Can I comply with this AD in any other way? You may use an alternative method of compliance or adjust the compliance time if:

- (1) Your alternative method of compliance provides an equivalent level of safety; and
- (2) The Manager, Wichita Aircraft Certification Office (ACO), approves your alternative. Submit your request through an FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Wichita ACO.

Note 2: This AD applies to each airplane identified in paragraph (a) of this AD, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the

modification, alteration, or repair on the unsafe condition addressed by this AD; and, if you have not eliminated the unsafe condition, specific actions you propose to address it.

(f) Where can I get information about any already-approved alternative methods of compliance? Contact Clyde Erwin, Aerospace Engineer, FAA, Wichita Aircraft Certification Office, 1801 Airport Road, Room 100, Wichita, Kansas 67209, telephone: (316) 946-4149; facsimile: (316) 946-4407.

(g) What if I need to fly the airplane to another location to comply with this AD? The FAA can issue a special flight permit under sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate your airplane to a location where you can accomplish the requirements of this AD.

(h) Are any service bulletins incorporated into this AD by reference? Actions required by this AD must be done in accordance with Cessna Service Bulletin No. SB525-24-20, dated November 16, 2000. The Director of the Federal Register approved this incorporation by reference under 5 U.S.C. 552(a) and 1 CFR part 51. You can get copies from Cessna Aircraft Company, Product Support, P.O. Box 7706, Wichita, Kansas 67277. You can look at copies at FAA, Central Region, Office of the Regional Counsel, 901 Locust, Room 506, Kansas City, Missouri, or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC .

(i) When does this amendment become effective? This amendment becomes effective on February 28, 2001.

FOR FURTHER INFORMATION CONTACT: Clyde Erwin, Aerospace Engineer, FAA, Wichita Aircraft Certification Office, 1801 Airport Road, Room 100, Wichita, Kansas 67209, telephone: (316) 946-4149; facsimile: (316) 946-4407.

Issued in Kansas City, Missouri, on January 24, 2001.

David R. Showers, Acting Manager, Small Airplane Directorate, Aircraft Certification Service.